

REMARKS

Applicants respectfully reassert their traversal of the restriction requirement of Paper No. 4.

Support for the amendments to claims 1 and 2 may be found, for example, in original claims 3 and 8-11.

The Examiner has objected to the specification at page 5, lines 8-10 as having no disclosure directed to a photoconductive imaging member described by the labels "a" through "d." While Applicants are in disagreement with this objection, the specification has been amended to specify a "hole blocking layer" described by the labels "a" through "d." Support for this amendment may be found at page 3, line 27-page 4, line 2, which states the structure of the hydrolyzed silane in the hole blocking layer includes the structure depicted in Scheme 1 on page 4. Please also note that the hole blocking layer can be part of the "photoconductive imaging member".

The Examiner has further objected to the specification at page 5, lines 10-17 as having no disclosure for a photoconductive imaging member described by the reference labels A, B, D, and F. The specification has been amended to more specifically specify a "hole blocking layer" described by the reference labels A, B, D, and F. Support for this amendment may also be found at page 3, line 27-page 4, line 2 of the specification.

Additionally, kindly note that on page 6, the paragraph beginning on line 16 and running to line 19 has been amended slightly. During further review of the application in preparing this amendment, it was noted that there was an 's' missing from the word "micrometer." It was also noted that a period was missing. Consequently, the application has also been amended to correct these typographical errors.

The specification has also been objected to at page 6, line 15 for not defining or disclosing a chemical structure of the polymer PSEB. Applicants respectfully disagree with this objection, submitting that no specific definition is needed as the polymer structure would be readily ascertainable to one of ordinary skill in the art.

PSEB is clearly given as an abbreviation for polysebacoyl-TBD by its placement in parentheses immediately after the polymer name. Sebacoylchloride is a known monomer available from Aldrich Chemical (see attachment). The chemical structure of PSEB would thus be known to one of skill in the art without further description.

The Examiner has objected to the specification at page 11, lines 4-6 for failure to define the terms "6J" and "9J." Applicants have amended the specification to refer to a degree of crosslinking of "about 6% to about 9%." Applicants respectfully submit the terms "6J" and "9J" were typographical errors and should have read "6%" and "9%." This typographical error would be readily apparent to one of ordinary skill in the art, since it is known that degree of crosslinking is measured as a percentage.

The usage of the trademark symbol, TM, has been added at page 13, line 28.

The Examiner indicated that in the Example on page 18, line 26, one of the compositions is missing. However, upon review of the specification, one skilled in the art would be apprised of the compositions suitable.

The Examiner has objected to the specification for failing to provide proper antecedent basis for the claimed subject matter. The Examiner states the claimed resilient, electrically insulating overcoating layer of claims 1 and 2 is broader than the disclosed overcoating layer at page 3, lines 18-20. Applicants respectfully disagree with this objection. The specification discloses an overcoating layer "comprising" an elastomer. It is well known that the term "comprising" is an open-ended term that allows the inclusion of additional elements. Moreover, the claims are to be interpreted in light of the specification, but limitations within the specification are not to be read into the claims. MPEP § 2111. The antecedent basis for a resilient, electrically insulating overcoating layer does exist and Examiner's contention that the claim language is broader than the disclosure is an improper attempt to read a limitation in the specification into the claims. Furthermore, since the specification of the application includes the claims as filed, support clearly exists in the application.

Claims 15 and 16 have been amended to specify that the substituent X has from about 1 and 12 carbon atoms (claim 15) or from about 1 and 5 carbon atoms

(claim 16). Support for this amendment may be found, for example, at page 10, lines 5-6. This amendment has been made to clarify antecedent basis.

Applicants respectfully disagree with the Examiner's objection to claim 17 as not having antecedent basis. Examiner's objection is an improper attempt to read a limitation of the specification into the claims as discussed above.

While in disagreement with the Examiner, claims 22 and 23 have been amended to correct the alleged improper antecedent basis for the charged blocking layer.

Applicants respectfully disagree with the Examiner's objection to claim 26. The Examiner states the specification discloses a crosslinked dimethylpolysilane hydrolyzate. Applicants respectfully submit the referenced passage in the specification discloses an overcoating the crosslinked silicone, not a crosslinked silicone overcoating layer.

The Examiner has rejected claims 4, 5, 11, and 19 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to point out and particularly claim the subject matter which Applicant regards as the invention. Applicants respectfully traverse this rejection.

Applicants submit the amendment to claim 1 corrects a previously improper antecedent basis in claims 4 and 5 and overcomes the Examiner's 35 U.S.C. § 112, second paragraph rejections. This amendment does not affect the scope of the claims, or the interpretation thereof.

Claim 11 has been amended to correct improper Markush language and to clarify the antecedent basis for reference labels a, b, c, d, A, B, C, and F. Applicants submit the amendments to claim 11 overcome the Examiner's 35 U.S.C. § 112, second paragraph rejections.

Claim 19 has been amended to claim the "charge transporting layer including a resinous binder comprising polysebacoyl. Support for this amendment may be found on page 6, lines 4-15.

Applicants respectfully submit the above amendments and remarks fully overcome the Examiner's 35 U.S.C. § 112, second paragraph rejections. Removal of the rejections is respectfully requested.

Claims 15 and 16 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants respectfully traverse.

Claims 15 and 16 have been amended, as discussed above, to clarify that the charge transport layer includes a substituent, X, having from about 1 to about 12 carbon atoms (claim 15) or from about 1 to about 5 carbon atoms (claim 16). Support for this amendment may be found at page 10, lines 5-6. Furthermore, claims 15-16, as well as claims 13-14, have been amended to indicate that the charge transport layer is not an optional layer in claim 1.

Applicants respectfully submit the above amendments and remarks overcome the Examiner's 35 U.S.C. § 112, first paragraph rejections and respectfully request withdrawal of the rejections.

Claims 1, 2, 7, 22-24, and 26 have been rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over US 4,600,673 (Hendrickson) combined with US 6,210,767 B1 (Knauf) and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

The Examiner states that Hendrickson discloses a photoconductive imaging member comprising a conductive substrate, a photoconductive layer, and a topcoat comprising a cured film-forming silicone polymer. The Examiner has not established that each feature and the combination thereof is disclosed, nor has the Examiner established a prima facie case of obviousness. Additionally, since the Examiner has not indicated that Hendrickson does not disclose or claim a hole blocking layer or a charge injecting surface on the substrate as set forth in independent claims 1 and 2.

These claims are thus patentably distinct from Hendrickson and are not anticipated by Hendrickson. Claims 7, 22-24, and 26, each dependent from non-anticipated claim 1 are not anticipated by Hendrickson due to the presence of a hole blocking layer. Applicants respectfully request withdrawal of the 35 U.S.C. § 102(b) rejections.

Applicants further submit claims 1, 2, 7, 22-24, and 26 are not obvious over Hendrickson when combined with Knauf and the cited Chemical dictionary. The Examiner has not shown that there is a teaching or suggestion within any of the cited references that would lead one of skill in the art to include a hole blocking layer or charge injecting surface such as those claimed in the present invention in the assembly of Hendrickson. Moreover, Knauf is directed to labels, not an imaging member such as that claimed in the present invention. There is no showing by the Examiner of a teaching in Knauf of a hole blocking layer or charge injecting surface for an imaging member. Applicants respectfully submit that claims 1 and 2, and claims 7, 22-24, and 26 (each dependent from claim 1) are not obvious over the cited references due to the presence of a hole blocking layer and charge injecting surface in independent claims 1 and 2. The Examiner has impliedly agreed with this by not rejecting claims 3 and 8-11 as obvious over the cited references. Withdrawal of the 35 U.S.C. § 103(a) rejections is therefore respectfully requested.

Claims 1, 2, 7, 13 and 22-26 have been rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over US 5,556,730 (Nguyen) combined with Hendrickson, Knauf, and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

The Examiner states that Nguyen discloses a positive charging photoconductive imaging member comprising a conductive substrate, a charge transporting layer, a charge generating layer, a charge injection barrier layer, and a release layer comprising a crosslinked silicone polymer. Nguyen does not disclose or claim a hole blocking layer or charge injecting surface on a supporting substrate. By contrast, the present invention requires the presence of a hole blocking layer and charge injecting surface on the substrate in independent claims 1 and 2. These claims are thus patentably distinct from Nguyen and are not anticipated by Nguyen. Claims 7, 13, and 22-26, each dependent from claim 1 are also not anticipated by Nguyen due to the presence of a hole blocking layer and charge injecting surface. Applicants respectfully request withdrawal of the 35 U.S.C. § 102(b) rejections.

Applicants further submit claims 1, 2, 7, 13, and 22-26 are not obvious over Nguyen when combined with Hendrickson, Knauf, and the cited Chemical dictionary.

The Examiner has not shown that there is a teaching or suggestion within any of the cited references that would lead one of skill in the art to include a hole blocking layer such as that claimed in the present invention or charge injecting surface on a supporting substrate such as that claimed in the present invention in the photoconductor of Nguyen, even when combined with Hendrickson, Knauf, and the cited chemical dictionary. Applicants therefore respectfully submit that claims 1 and 2, as well as claims 7, 13, and 22-26 (each dependent from claim 1) are not obvious over the cited references due to the presence of a hole blocking layer in independent claims 1 and 2. The Examiner has impliedly agreed with this reasoning by not rejecting claims 3 and 8-11 over the cited references. Withdrawal of the 35 U.S.C. § 103(a) rejections is therefore respectfully requested.

Claims 1, 2, 6-9, 11-14, 20-24, and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,287,737 B1 (Ong '737) combined with US 5,124,220 (Brown), Hendrickson, Knauf, and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

The Examiner states that Ong '737 discloses a photoconductive imaging member comprising (1) a conductive substrate, (2) a hole blocking layer, (3) an adhesion layer, (4) a charge generation layer, and (5) a charge transport layer. Applicants respectfully submit that Ong '737, even when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary, does not teach or suggest a supporting substrate including a charge-injecting surface as required by claims 1 and 2 of the present invention. Moreover, there is no motivation within Ong '737 or the other cited references that would lead one of ordinary skill in the art to include a charge injecting surface in the inventions of Ong '737, Brown, or Hendrickson. Applicants therefore respectfully submit that independent claims 1 and 2, as well as dependent claims 6-9, 11-14, 20-24, and 26 are not obvious over Ong '737 when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary due to the presence of a charge injecting surface on the supporting substrate of claims 1 and 2 of the present invention. The Examiner has impliedly agreed with this

reasoning by not rejecting claim 3 over the cited references. Withdrawal of the 35 U.S.C. § 103(a) rejections is therefore respectfully requested.

Claims 1, 2, 6-9, 12-14, 20-24, and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over US 5,871,877 (Ong '877) combined with Brown, Hendrickson, Knauf, and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

The Examiner states that Ong '877 discloses a photoconductive imaging member comprising (1) a conductive substrate, (2) a hole blocking layer, (3) an adhesion layer, (4) a charge generation layer, and (5) a charge transport layer. Applicants respectfully submit that Ong '877, even when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary, does not teach or suggest a supporting substrate including a charge-injecting surface as required by claims 1 and 2 of the present invention. Moreover, there is no motivation within Ong '877 or the other cited references that would lead one of ordinary skill in the art to include a charge injecting surface on the supporting substrate. Applicants therefore respectfully submit that independent claims 1 and 2, as well as dependent claims 6-9, 12-14, and 20-24 are not obvious over Ong '877 when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary due to the presence of a charge injecting surface on the supporting substrate of claims 1 and 2 of the present invention. The Examiner has impliedly agreed with this reasoning by not rejecting claim 3 over the cited references. Withdrawal of the 35 U.S.C. §103(a) rejections is therefore respectfully requested.

Claims 1, 2, 6-9, 12, 13, 17, 18, 20-24, and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over US 5,316,880 (Pai) combined with Brown, Hendrickson, Knauf, and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

According to the Examiner, Pai discloses a photoconductive imaging member comprising (1) a conductive substrate, (2) a hole blocking layer, (3) an adhesion layer, (4) a charge generation layer, and (5) a charge transport layer. Applicants respectfully submit that Pai, even when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary, does not teach or suggest a supporting substrate including a charge injecting surface as required by claims 1 and 2 of the present

invention. Moreover, there is no motivation within Pai or the other cited references that would lead one of ordinary skill in the art to include a charge injecting surface on the supporting substrate. Applicants therefore respectfully submit that independent claims 1 and 2, as well as dependent claims 6-9, 12, 13, 17, 18, 20-24, and 26 are not obvious over Pai when combined with Brown, Hendrickson, Knauf, and the cited chemical dictionary due to the presence of a charge injecting surface on the supporting substrate of claims 1 and 2 of the present invention. The Examiner has impliedly agreed with this reasoning by not rejecting claim 3 over the cited references. Withdrawal of the 35 U.S.C. §103(a) rejections is therefore respectfully requested.

Claims 1-5, 7, 13, 14, 21, and 22-26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,251,612 (Chu) combined with Nguyen, Hendrickson, Knauf, and Grant & Hackh's Chemical Dictionary, fifth edition, pages 293, 503, and 531. Applicants respectfully traverse.

According to the Examiner, Chu discloses a positive charging photoconductive imaging member comprising (1) a substrate, (2) a charge injecting layer, (3) a charge transport layer, (4) a charge generation layer, and (5) an insulating organic overcoat layer. Applicants respectfully submit that Chu does not disclose or teach a hole blocking layer such as the layer of claims 1 and 2 of the present invention. Moreover, even when combined with Nguyen, Hendrickson, Knauf, and the cited chemical dictionary, there is no motivation provided that would lead one of ordinary skill in the art to include a hole blocking layer on the imaging member of Chu. Applicants therefore respectfully submit that independent claims 1 and 2, as well as dependent claims 7, 13, 14, 21, and 22-26, are not obvious over Chu when combined with Nguyen, Hendrickson, Knauf, and the cited chemical dictionary due to the presence of the claimed hole blocking layer. Moreover, the Examiner has impliedly agreed with this reasoning by not rejecting claims 8-11 over the cited references. Withdrawal of the 35 U.S.C. § 103(a) rejections is respectfully requested.

The Examiner has objected to claim 10 as being dependent upon a rejected claim, but allowable if rewritten in independent form including all of the limitation of the base claim. Claim 10 has been amended accordingly and Applicants respectfully request withdrawal of the objection.

Applicants respectfully request withdrawal of the objections and rejections and issuance of a Notice of Allowance.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this Amendment is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop NON-FEE AMENDMENT, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on **August 11, 2003**.

By: 
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